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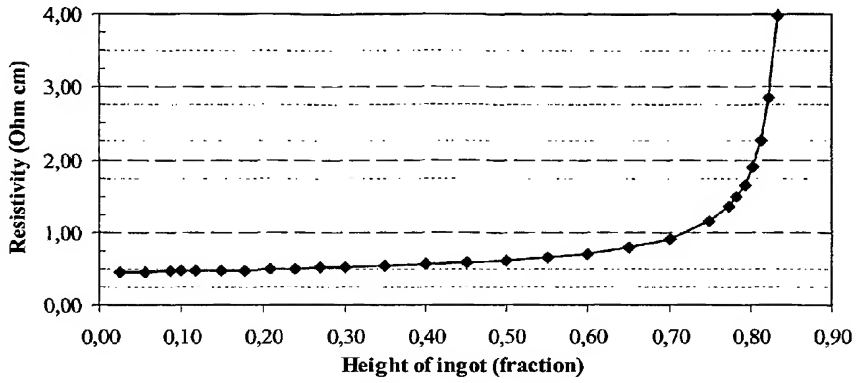
(54) Title: SILICON FEEDSTOCK FOR SOLAR CELLS



(57) Abstract: The present invention relates to silicon feedstock for producing directionally solidified silicon ingots, thin sheets and ribbons for the production of silicon wafers for PV solar cells where the silicon feedstock contains between 0.2 and 10 ppma boron and between 0.1 and 10 ppma phosphorus distributed in the material. The invention further relates to directionally solidified silicon ingot or thin silicon sheet or ribbon for making wafers for solar cells containing between 0.2 ppma and 10 ppma boron and between 0.1 ppma and 10 ppma phosphorus distributed in the ingot, said silicon ingot having a type change from p- type to n-type or from n-type to p-type at a position between 40 and 99 % of the ingot height or sheet or ribbon thickness and having a resistivity profile described by an exponential curve having a starting value between 0.4 and 10 ohm cm and where the resistivity value increases towards the type change point. Finally the invention relates to a method for producing silicon feedstock for producing directionally solidified silicon ingots, thin sheets and ribbons for the production of silicon wafers for PV solar cells.

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